### Purpose of the Research

The applicant shall indicate the general nature of the research and the specific purpose of the research, <u>after succinctly summarizing it and providing an outline at the beginning</u>, and with the existing academic literature referred to where necessary. In particular, details shall be given clearly with a focus on the following points. [Refer to the rules concerning the screening and assessment for Grants-in-Aid for Scientific Research. (cf. Application Procedures for Grants-in-Aid for Scientific Research)]

- 1) Scientific background for the research (e.g., domestic and overseas trends related to the research and positioning of the research; how the applicant has reached the concept based on his or her achievements in earlier research work; and details of achievements in past research work where the purpose of this project is to attain a greater level of knowledge in a similar area)
- 2) What will be elucidated and to what extent will it be pursued during the research period
- 3) Scientific characteristics, originality and expected results and significance of the research in the area
- 4) Differences in goals if you have applied for a grant for another research project falling into Scientific Research (A) that is associated with the present research; or differences in details of the research if you have applied for a grant for another research project falling into Scientific Research (A) that is not associated with the present research (Persons to whom this applies should be sure to enter this.)

			with the present research (Persons to whom this applies should be sure to enter this.)
	Research	(Outline)	*Concerning the Purpose of the Research Project, the applicant should succinctly summarize and
describe in detail.			

	belefitific Research 5-2
Purpose of the Research (continued)	

## **Research Plan and Method**

The applicant should provide details of the research plan and the method for achieving the objectives of the research in a clear and specific manner, after succinctly summarizing it and providing an outline at the beginning. The plan should be divided into one for FY2014 and one for FY2015. The literature should be referred to as needed and main points should be highlighted. The plan and methods should indicate achievements through a discussion from different angles, such as action to be taken in the event that the research does not progress as originally planned. Where the research plan is being implemented by a group, indicate the specific roles of the Principal Investigator and the Co-investigator (kenkyu-buntansha) of the research team (using figures, tables and other visual aids). In case the research plan is being implemented together with Co-Investigators (kenkyu-buntansha), include the necessity and rationality of the project members, and the relationship to the purpose of the research from the scientific viewpoint. In addition, in order to clearly indicate the general view of the research team, state the roles of Co-Investigators (renkei-kenkyusha) and Research Collaborators [overseas co-researchers, company-employed researchers not eligible to apply for KAKENHI, other persons offering research support, such as technical experts and intellectual property specialists, graduate students and others (the names and the number of members may be stated)] as needed.

	antly halfway through the research period, due to personnel changes, retirements, etc., the of the implementation of the research is secured, research implementation methods, etc.
Research Plan and Method (Outline)	*Concerning the Research Plan and Method to accomplish the Purpose of the Research, the
applicant should succinctly summarize and describe in detail. $\\$	

Research Plan and Method (continued)	

	Scientific Research 5-5
Research Plan and Method (continued)	
Research I fan and Method (Continued)	

	arations for	the Resear	ch Plan and Methods to Disseminate the Res	search Results to
Society and C		1'-1 d and state	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	`
1) The current state 2) The state of pro- (kenkyu-buntan	te of research envi eparation for start usha) (This should	ronment, such as ing the research, s	d in a clear and specific manner: research facilities, equipment and materials that are to be used in consuch as coordination and contact with project members, in case there appropriate in the case that there are Co-Investigators (renkei-kenk	e are Co-Investigator(s)
(kenkyu-buntansha) (This should also be stated if appropriate in the case that there are Co-Investigators (renkei-kenkyusha) and/or Research Collaborators.)  3) How the research achievements will be disseminated to society and members of the public				
			r the Final Year of a Research Plan	
_			plicants. (cf. Application Procedures for Grants-in-Aid for Scien	_
			on of a continued research project having FY2014 as the final year cant should also state new findings in the research and other research	
reasons why the a	pplicant restructur	es the research pl	an in the light of developments in the research in question, and appl	ies for the research this
11			developed and a justification of the cost). (Do not include the resear nding Received and Achievements on Scientific Research S - 7.)	ch achievements of the
Research Category	Screening Division	Project Number	Title of Research Project	Research Period
outegary	21,191011	1 (02220002		
				From FY
Initial Resear	ch Plan and	Results		From FY to FY2014
Initial Resear	ch Plan and	Results		
Initial Resear	ch Plan and	Results		
Initial Resear	ch Plan and	Results		
Initial Resear	ch Plan and	Results		
Initial Resear	ch Plan and	Results		
Initial Resear	ch Plan and	Results		
		Results		
Initial Resear		Results		
		Results		

Research Funding Received and Achievements
State the achievements of funded research that is being used for planning the current research from the grants that the Principal Investigator / Co-Investigator (kenkyu-buntansha) has received (including KAKENHI, research funding provided by his or her research institution, research
funding paid by any ministry/office, local public organization, research promotion corporation, private corporation and any current research funding). Classify the grants into KAKENHI and others. The following should be taken into account:
1) For each research funding, state the research category (name of the system for research funding other than KAKENHI), period (fiscal year),
title of the research project, whether the applicant is the Principal Investigator or Co-Investigator (kenkyu-buntansha), and eligible costs (direct
costs) of the research. Also give a clear statement of the research achievements and interim and after-the-fact assessment results (only to be
made by the funding organizations). (If there are research progress assessment results for KAKENHI in FY2012 or in FY2013, they should be described in the section "Connection between the Research Plan and the Research Project which received a Research Progress Assessment" on
Scientific Research S-9.)
2) The applicant should describe them and make a distinction by drawing a line between KAKENHI and other research funding.

Research Funding Received and Achievements (continued)	

Scientific Research S
Connection between the Research Plan and the Research Project which received a Research Progre
Assessment
<ul> <li>If the Principal Investigator of the current application received a research progress assessment in FY2012 or in FY2013, as a Principal Investigator of "Specially Promoted Research", "Scientific Research (S)" or "Grant-in-Aid for Young Scientists (S)", he or she should describe it in this section.</li> <li>The researcher should describe the connection between the research plan and the research project which received a research progress assessment in this section (e.g. what kind of connection is there, how the researcher will advance the research which received a research progress assessment in concrete terms, etc.).</li> </ul>

Protection of Human Rights and Compliance with Laws and Regulations (cf. Application Procedures for
Grants-in-Aid for Scientific Research)
Describe the measures and actions that you will take if your research involves compliance with the related laws and regulations (e.g. research
requiring the consent and the cooperation of the other party, research requiring consideration for the handling of personal information and
research requiring efforts regarding bioethics and safety measures when implementing the research plan). This applies to surveys, research,
experiments which require an approval procedure in an ethics committee inside and outside the research institution, such as for example
questionnaire surveys and interview surveys in which personal information is involved, the use of provided samples, analysis study of the
human genome, recombinant DNA experiments, experiments on animals, etc. Please indicate where this is not applicable.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Method</i> . Indicate the necessity of the cost (e.g. breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personnel expenditure and remuneration) exceeds 90% of the entire research funding, or if there is any other predominant cost.

	- Equipr	nent Currently Use	(See Proc	edures for Prep	aring and Enter	ing a Proposal for Gr		"Scientific Res	earch (S)")
	earch	Equipment		rications (		Exclusive/	FY of	Re	emarks
msuu	ution		<u> </u>	erforman	ce)	Joint Use	Installation		
taten	nent of (	Costs for Equipmen	it (See Proc	edures for Prepa	aring and Enter	ing a Proposal for Gra	int-in-Aid for	"Scientific Res	earch (S)")
	T		1	T == -	1	T		(Unit:	Thousands of y
FY	Items	and Specifications	Qty	Unit	Amount	Names of	of Main U	Jsers	When to
014				Price	(¥)	(Researcher	r and Inst	itution)	Purchas
014									
					•	Ī			

(See Proced	ent of Costs for ures for Preparing and Consumab		oosal for Grant-in-Aid fo Travel Exp		Personnel Expen		(Unit: thousand	
FY	Team	Amount	Itama	Amount	Remunerat	ion Amount	Itama	Amour
	Item	(¥)	Item (Domestic)	(¥)	Item	(¥)	Item	(¥)
2014			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
			(0)					
2015			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
2016			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
2017			(Overseas)					
	Total		Total (Domestic)		Total		Total	
2018			(Overseas)					
	Total		Total		Total		Total	

# <u>Scientific Research S-13</u> <u>Proposal of the Researcher Conducting Scientific Research (S) for FY2014</u>

Researcher	Name			Date of Birth (age)		(_	years old)
	Institution, Academic Unit, Position		Academic Degree		Field of Specialization		
Recent R	Research Activities	<u>                                     </u>					
		key research papers/articles, books (	excluding textb	ooks, abstracts	of academic meeting	es and	summaries of
		nd invited lectures in the sequence of	_				
		ournals may be included, if they have b	-			Ü	
		h Papers/articles, Titles of B			itions		
(For publishe	ed research papers/articles	s, state the title, the names of authors,	name of the jou	rnal, referee read	ling (or not), volume.	, page r	numbers of the
first and last	pages and year of publica	ation.)(The above mentioned sequence	e of such items	is not compulsor	ry as long as all of th	e items	s are included.
Only include	some authors omitting of	thers, if there are many authors (if any	authors' names	s are omitted, sta	te the number of the	authors	and the order
		researchers). The Principal Investig				e, Co-	Investigator(s)
(kenkyu-buni	tansha) with a single unde	erline, and the Co-Investigator(s) (renk	kei-kenkyusha) y	with a dotted und	lerline. )		

Scientific Research S-14 **Recent Research Activities (continued)** 

To be filled in and attached to the proposal for grant-in-aid for each Principal Investigator and Co-Investigator (*kenkyu-buntansha*)

Name of researcher					
	arch Funding, the Curre	ent State	e of Funding	g and F	Effort
be sufficiently implemented applicant correctly states the The applicant should take in provided and (3) other acti Distinguish between sources data, the applicant should veing in Effort with a petime is set at 100%.  2) State the title of the res in the case of a KAKI state whether it is "pla in the case where the should also state the capture of the case where the should also state the capture in the should also state the should also state the capture in the should also state the should also should also state the should also state the should also should als	without causing unreasonable dup budget for the proposed research p to consideration the following poir vities at the time of application of research funding by drawing a rify the Procedures for Preparing ar reentage of time allocation (%) newearch project at the beginning of RENHI for "Scientific Research on Inned research" or "invited research ag to be competitively provided by applicant is conducting research in details of the research funding. Monis effect in the section "Difference	lication or roject that I ats and enter by the Prin line, if ther and Entering cessary for esearch Fundamental for the research in line with preover, if the state of the stat	excessive concerne or she receives or (1) the research neipal Investigate is more than or a Proposal for Game the implementate inding Applied for Areas (Research in institution to was a specific purposhe amount provides	ntration of s and uses a funding or and the first the fi	applied for, (2) the research funding to be e Co-Investigator(s) (kenkyū-buntansha). e exact method for filling in the necessary id for "Scientific Research (S)". research where the entire yearly working osed research area)", the applicant should
(1) Research Funding	1 **	I Dolo	In a surrect		
Funding system and name of the research funding (research period and name of the funding organization)	Title of the research project (name of the Principal Investigator)	Role (Principal Investigator or Co-Investiga tor (kenkyu-bun tansha))	Budget for FY2014 (throughout the period) (Unit: Thousands of yen)	Effort (%)	Differences in details of research and reasons for additional application for a grant for the current research project (In the case of a Principal Investigator of a KAKENHI, the amount to receive for the whole research period)
Research project for which a grant is applied Scientific Research (S) (2014)			( )		(total budget in thousands of yen)

To be filled in and attached to the proposal for grant-in-aid for each Principal Investigator and Co-Investigator (*kenkyu-buntansha*)

Application for Research Funding, the Current State of Funding and Effort (continued)								
(2) Research Funding to be Provided  Funding system and name of Title of the research project Role Budget for Effort Differences in details of research and								
Funding system and name of the research funding (research	Title of the research project (name of the Principal	(Principal	Budget for FY2014	Effort (%)	reasons for additional application for a			
period and name of the	Investigator)	Investigator or	(throughout	(70)	grant for the current research project			
funding organization)	investigator)	Co-Investig	the period) (Unit:		(In the case of a Principal Investigator of a KAKENHI, the amount to receive for the whole research period)			
,		ator (kenkyu-bu	Thousands of		. ,			
		ntansha))	yen)					
(3) Other Activities								
	esearch and educational activities	ed out as other						
	aid research activities under appli							
Total								
(Total of the effort in (1), (2) and (3) above)								
				(%)				